

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Vincent P. Walker et al.	Art Unit	: 3724
Serial No.	: 10/799,938	Examiner	: Edward F. Landrum
Filed	: March 11, 2004	Conf. No.	: 8045
Title	: SHAVING CARTRIDGES AND RAZORS		

Mail Stop Appeal Brief - Patents

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

BRIEF ON APPEAL

Applicants are appealing the final rejection of claims 1-18 and 38-50 in the office action mailed August 28, 2006. Applicants request that the rejection be reversed. A notice of appeal was filed on November 14, 2006.

(1) Real Party in Interest

The real party in interest is The Gillette Company, Prudential Tower Building, Boston, Massachusetts. The Gillette Company recently was acquired by The Procter & Gamble Company.

(2) Related Appeals and Interferences

There are no related appeals or interferences.

(3) Status of Claims

Claims 1-52 are pending. Claims 19-37, 51, and 52 have been withdrawn from consideration. Claims 1-18 and 37-50 stand finally rejected.

Claims 1-8 and 38-45 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Simms, U.S. Patent Application Publication No. 2002/0023351 ("Simms"). Claims 9, 12-15, 46, and 47 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Simms in view of Apprille et al., U.S. Patent No. 5,249,361 ("Apprille"). Claims 10 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Simms in view of Andrews, U.S. Patent No. 6,145,201 ("Andrews"). Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Simms in view of Gilder, U.S. Patent Application Publication No.

2002/0000040 ("Gilder"). Claims 17, 18, 48, and 49 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Simms in view of Rosenkranc, U.S. Patent No. 6,276,061 ("Rosenkranc").

(4) Status of Amendments

All amendments have been entered.

(5) Summary of Claimed Subject Matter

The claims relate to shaving cartridges (see e.g., specification, page 1, lines 2-3). Claims 1 and 38 are the only non-withdrawn pending independent claims. Examples of many of the claimed features are shown in figures 23 and 27, depicted below.

FIG. 23

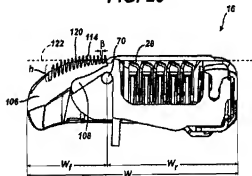
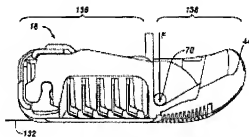


FIG. 27



As set forth in claims, the shaving cartridge includes a housing, a front portion, a rear portion, and two side surfaces extending from the front portion to the rear portion (see e.g., specification, page 6, lines 19-20; specification, page 19, lines 17-22; specification, page 20, lines 13-20; figs. 23, 27, and 39). In figure 27, for example, reference number 136 indicates the front portion and reference number 138 indicates the rear portion. The shaving cartridge further includes a pivoting structure defining a pivot axis for pivoting of the housing with respect to the handle (see e.g., specification, page 16, lines 1-7). In figures 23 and 27, for example, reference number 70 indicates a pivot axis.

The shaving cartridge also includes a housing axis extending from the rear portion to the front portion perpendicular to the pivot axis (see e.g., specification, page 19, lines 5-9). The rear portion further includes a rear surface (see e.g., figs. 23 and 27). The shaving cartridge also

include one or more shaving blades between the front portion and the rear portion (see e.g., specification, page 1, lines 14-15; figs. 23 and 27). The one or more blades extend along respective one or more parallel blade axes that are parallel to the pivot axis and located behind the pivot axis (see e.g., specification, page 1, lines 15-17; figs. 23 and 27).

The shaving cartridge also includes a guard at the front portion of the housing (see e.g., specification, page 6, lines 19-23; figs. 3, 23, and 27). The guard includes an elastomeric member that extends along the housing axis in front of the pivot axis by a front distance (W_f) that is equal to, or no more than 45 percent less than, a rear distance (W_r) along the housing axis from the pivot axis to the rear surface, so as to provide a cartridge that is substantially balanced about the pivot axis (see e.g., specification, page 18, line 3 – page 19, line 9; fig. 23). As shown in figures 23 and 27 above, the front portion (136) has a front distance W_f that is no more than 45 percent shorter than the rear distance W_r of the rear portion (138). The front and rear distances are determined by the width of the blade unit (W) as divided by the pivot axis 70 (see e.g., specification, page 18, lines 7-31; fig. 23).

(6) Grounds of Rejection to be Reviewed on Appeal

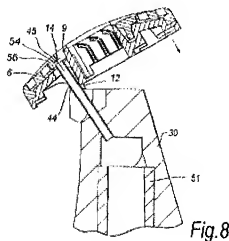
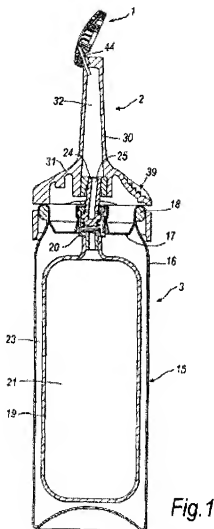
Applicants request reversal of all 35 U.S.C. § 103(a) rejections.

(7) Argument

Claims 1-8 and 38-45 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Simms. The remaining pending claims, each dependent upon either independent claim 1 or independent claim 38, have also have been rejected as unpatentable over Simms in combination with various secondary references (claims 9, 12-15, 46 and 47 -- Simms in view of Aprille; claims 10 and 16 -- Simms in view of Andrews; claim 11 -- Simms in view of Gilder; and claims 17-18 and 48-49 -- Simms in view of Rozenkranc.). The Examiner has failed to present a prima facie case of obviousness, and thus these rejections should be withdrawn.

As shown below, Simms discloses a “blade unit (1) . . . mounted on a carrying structure (2) for pivotal movement, and a delivery system (25,32,44) for conducting from a reservoir (21) a fluid, e.g. a lubricating fluid.” (Simms, Abstract; fig. 1). Simms discloses a delivery tube 44 and a discharge port 45. (Simms, page 3, paragraph 27; figs. 1 and 7). Simms discloses that

"discharge port 45 is disposed at a small distance on the underside of the guard surface 6 adjacent the backstop 9." (Simms, page 3, paragraph 27) Simms discloses that "[a]s a result of the discharge port 45 being located at or very close to the pivot axis 14 reliable delivery of fluid to the desired location on the blade is ensured while the pivoting capability is not impaired in any respect." (Simms, page 3, paragraph 27).



Claims 1 and 38 require that the front distance (W_f), shown in FIG. 23 above, is equal to, or no more than 45 percent less than, the rear distance (W_r). Simms does not disclose "a front distance that is equal to, or no more than 45 percent less than, a rear distance." The razor

assemblies shown in the figures of Simms further suggest a razor assembly having a front distance that is about 65 percent less than a rear distance. (See Amendment in Reply to Action of May 18, 2006, filed July 20, 2006, page 13).

The Examiner agreed that Simms does not teach the “specific optimal lengths, ranges, or percentages of both the front portion and the portion from the pivot axis to the rear surface. More specifically the front portion being equal to the rear portion or no more than [45] percent less than the rear portion.” (See Office Action, mailed August 28, 2006, page 2). However, the Examiner asserts that

[i]t would have been an obvious matter of design choice to make the front portion a length of 6 mm and the rear distance a length of about 10 mm or any other optimal lengths, or percentages of front distance as compared to rear distance, *for the purpose of finding the best front to rear distance ratio to correctly balance the shaving head*, because discovering optimal lengths from a pivot axis to balance the shaving head would have been a mere design consideration based on the length of the various materials and objects included in the shaving head.

This is a classic example of hindsight reconstruction. The Examiner is starting from the problem solved by the Applicant, i.e., balancing the cartridge about the pivot axis. However, it was Applicant who recognized this problem, which is not mentioned in the art of record. The Examiner then works backwards from this starting point, improperly using Applicant's disclosure as a guide to reconstruct Applicant's invention from the prior art. Furthermore, the Examiner's failure to consider segments of Simms' disclosure that suggest against a wholesale redesign of the Simms razor serves as further evidence of the hindsight reconstruction proposed by the Examiner.

The Examiner bases his conclusion of obviousness on the proposition that “it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art,” gleaned no doubt from MPEP 2144.05 (II)(A), which cites In re Aller, 105 USPQ 233, in support of this assertion. Applicant respectfully notes that in In re Yates, 663, F.2d 1054, 1056 (CCPA 1981), the court expressed a concern with using In re Aller to support such a broad proposition:

The problem, however, with such “rules of patentability” (and the ever-lengthening list of

exceptions which they engender) is that they tend to becloud the ultimate legal issue – obviousness – and exalt the formal exercise of squeezing new factual situations into preestablished pigeonholes. Additionally, the emphasis upon routine experimentation is contrary to the last sentence of section 103.

The proper test for non-obviousness is whether the differences between the subject matter and the prior art are such that the claimed subject matter as a whole would have been obvious to a person having ordinary skill in the art to which the subject matter pertains, as explained in Graham v. John Deere and Co., 383 U.S. 1 (1966).

Applicant respectfully submits that it would not have been obvious to the artisan to provide a cartridge having Applicant's claimed balance of front and rear distances from the from the pivot axis, thereby providing a cartridge that is substantially balanced about the pivot axis. The Examiner endeavors to support his conclusion of obviousness by contending that "discovering optimal lengths from a pivot axis to balance the shaving head would have been a mere design consideration based on the length of the various materials and objects included in the shaving head." The verb "discover" is apt: there is nothing in the prior art that would have led the artisan, "based on the length of the various materials and objects included in the shaving head," to modify Simms to reach Applicant's invention. Instead, this was Applicant's discovery.

Nor is In re Aller on point with regard to its facts. In In re Aller, the cited reference described a single experiment that would have invited further optimization (according to the Board, "any one in possession of the information presented by Hock et al. would naturally experiment to discover optimum conditions of temperature and concentration of acid for commercial exploitation of the process.") In contrast, in the present case there is nothing whatsoever in the art of record that would have led the artisan to believe that the Simms razor required further optimization in any respect, much less with respect to its balance characteristics. Furthermore, the artisan studying the disclosure of Simms would have been reluctant to modify the placement of the pivot axis of Simms due to Simms' disclosure of positioning the discharge port "at or very close to the pivot axis" and positioning the discharge port "at a small distance on the underside of the guard surface 6 adjacent the backstop 9." (Simms, page 3, paragraph 27).

In the advisory action mailed January 9, 2007, the Examiner maintained the rejection and further asserted that "[b]alancing a shaving head to improve shaving characteristics is old and

well known in the cutting art.” (Advisory Action mailed January 9, 2007, page 2). The Examiner then cites to “Ohtsubo et al (U.S Publication No. 2004/0093735, Richard et al (U.S Publication No. 2004/0025350), Motta (U.S. Publication No. 2003/0213130), and Peyser (U.S Publication No. 2002/0189112)” alleging that “all teach various ways to balance a shaving cartridge with respect to a handle for the purpose of providing an even and smoother shave.” (Advisory Action mailed January 9, 2007, page 2). Applicants note that the references relied upon by the Examiner are not presently of record, and respectfully submit that if the Examiner wishes to use the disclosure of these references to support the pending obviousness rejections, the Examiner should withdraw the current rejection under 35 U.S.C. 103(a) and issue a new non-final rejection specifically pointing out how one or more of these references would teach, suggest, or motivate one having ordinary skill in the art to modify the pivot axis of Simms to meet the requirements of the currently pending claims. Because the Examiner has not done this, these references should not be treated as secondary references in the currently standing final rejections under U.S.C. § 103(a).

Regardless, Applicants respectfully submit that there is no disclosure in any of these references that would teach, suggest, or motivate one having ordinary skill in the art to modify the Simms device in such a way that it would meet the requirements of either of independent claims 1 and 38. Even if these references do disclose the balancing of shaving cartridges with respect to a handle as alleged by the Examiner (which the Applicants do not concede), such a disclosure would not in itself motivate one having ordinary skill in the art to modify the position of the pivot axis of the Simms device. Doing so would undermine the express intent of Simms, namely to position the discharge port “at or very close to the pivot axis” and to position the discharge port “at a small distance on the underside of the guard surface 6 adjacent the backstop 9.” (Simms, page 3, paragraph 27).

In view of the above, Applicants respectfully submit that the rejection of the claims as obvious in view of Simms is improper. Various dependent claims have been rejected as unpatentable over Simms combined with secondary references (claims 9, 12-15, 46 and 47 -- Simms in view of Apprille; claims 10 and 16 -- Simms in view of Andrews; claim 11 -- Simms in view of Gilder; and claims 17-18 and 48-49 -- Simms in view of Rozenkranc.) Applicants submit that these claims are patentable for at least the reason that they depend from a patentable

Applicant : Vincent P. Walker et al.
Serial No. : 10/799,938
Filed : March 11, 2004
Page : 8 of 16

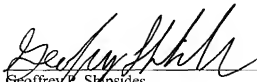
Attorney's Docket No.: 00216-659001 / Z-03353;
formerly Case 8129

base claim. The outstanding final rejections, therefore, are without basis, contrary to law, and must be reversed.

Please apply the appeal brief filing fee of \$500, and any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 1/16/2007



Geoffrey P. Shapsides
Reg. No. 55,617

Fish & Richardson P.C.
60 South Sixth Street
Suite 3300
Minneapolis, MN 55402
Telephone: (612) 335-5070
Facsimile: (612) 288-9696

Appendix of Claims

1. A shaving cartridge for connection to a handle, the shaving cartridge comprising:
a plastic housing having a front portion, a rear portion, two side surfaces extending from the front portion to the rear portion, pivoting structure defining a pivot axis for pivoting of the housing with respect to the handle, and a housing axis extending from the rear portion to the front portion perpendicular to the pivot axis, the rear portion having a rear surface;
one or more shaving blades between the front portion and the rear portion, the one or more blades extending along respective one or more parallel blade axes that are parallel to the pivot axis and located behind the pivot axis; and
a guard at the front portion of the housing including an elastomeric member that extends along the housing axis in front of the pivot axis by a front distance that is equal to, or no more than 45 percent less than, a rear distance along the housing axis from the pivot axis to the rear surface, so as to provide a cartridge that is substantially balanced about the pivot axis.
2. The shaving cartridge of claim 1, wherein the front distance is no more than 35 percent less than the rear distance.
3. The shaving cartridge of claim 1, wherein the front distance is substantially equal to the rear distance.
4. The shaving cartridge of claim 1, wherein the front distance is at least about 3.5 mm.

5. The shaving cartridge of claim 1 or 4, wherein the rear distance is at most about 11 mm.
6. The shaving cartridge of claim 1, wherein the front distance is between about 5.5 and 6.5 mm.
7. The shaving cartridge of claim 1 or 6, wherein the rear distance is between about 9.5 and 11 mm.
8. The shaving cartridge of claim 7, wherein the front distance is about 6 mm and the rear distance is about 10 mm.
9. The shaving cartridge of claim 1, wherein the elastomeric member includes an elastomeric fin.
10. The shaving cartridge of claim 9, wherein the fin extends along a fin axis that is parallel to the respective one or more blade axes, the fin having a length along the fin axis that is longer than a blade length.
11. The shaving cartridge of claim 9, wherein the fin is made of a material having a Shore A hardness between about 28 and 60.

12. The shaving cartridge of claim 1, wherein a leading portion of the elastomeric member extends beyond a leading edge of the front portion of the housing in a direction perpendicular to the blade axes.

13. The shaving cartridge of claim 12, wherein the leading portion is substantially unsupported along its length.

14. The shaving cartridge of claim 12, wherein the leading portion is sufficiently flexible to deflect upon contact with a user's skin.

15. The shaving cartridge of claim 14, wherein the leading portion is sufficiently flexible to conform to a contour of the user's skin during shaving.

16. The shaving cartridge of claim 12, wherein the leading portion has a first thickness adjacent the side surfaces of the housing, and tapers to a second, lesser thickness adjacent a center region of the guard.

17. The shaving cartridge of claim 1 further comprising a trimming assembly attached to the housing.

18. The shaving cartridge of claim 17, wherein the trimming assembly comprises a trimming blade.

38. A shaving razor including a handle and a cartridge connected to the handle, the shaving razor comprising:

a cartridge housing having a front portion, a rear portion and pivoting structure defining a pivot axis for pivoting of the housing with respect to the handle, and a housing axis extending from the rear portion to the front portion perpendicular to the pivot axis, the rear portion having a rear surface;

one or more shaving blades between the front portion and the rear portion, the one or more blades extending along respective one or more parallel blade axes that are parallel to the pivot axis and located behind the pivot axis; and

a guard at the front portion of the housing including an elastomeric member that extends along the housing axis in front of the pivot axis by a front distance that is equal to or not more than 45 percent less than a rear distance along the housing axis from the pivot axis to the rear surface so as to provide a cartridge that is substantially balanced about the pivot axis.

39. The shaving razor of claim 38, wherein the front distance is not more than 35 percent less than the rear distance.

40. The shaving razor of claim 38, wherein the front distance is substantially equal to the rear distance.

41. The shaving razor of claim 38, wherein the front distance is at least about 3.5 mm.
42. The shaving razor of claim 38 or 41, wherein the rear distance is at most about 11 mm.
43. The shaving razor of claim 38, wherein the front distance is between about 5.5 and 6.5 mm.
44. The shaving razor of claim 38 or 43, wherein the rear distance is between about 9.5 and 11 mm.
45. The shaving razor of claim 38, wherein the front distance is about 6 mm and the rear distance is about 10 mm.
46. The shaving razor of claim 38, wherein the elastomeric member includes an elastomeric fin.
47. The shaving razor of claim 38, wherein a leading portion of the elastomeric member extends beyond a leading edge of the front portion of the housing in a direction perpendicular to the blade axes.
48. The shaving razor of claim 38 further comprising a trimming assembly connected to the housing.

49. The shaving razor of claim 48, wherein the trimming assembly comprises a trimming blade.

50. The shaving razor of claim 38, wherein the cartridge is removably connected to the handle.

Applicant : Vincent P. Walker et al.
Serial No. : 10/799,938
Filed : March 11, 2004
Page : 15 of 16

Attorney's Docket No.: 00216-659001 / Case 8129 / Z-
03353

Evidence Appendix

None

Applicant : Vincent P. Walker et al.
Serial No. : 10/799,938
Filed : March 11, 2004
Page : 16 of 16

Attorney's Docket No.: 00216-659001 / Case 8129 / Z-
03353

Related Proceedings Appendix

None